

**AMENDMENT to the CLAIMS**

1. (currently amended) A computer-implemented method for converting a multilingual unidirectional domain name to a multilingual bidirectional domain name, said method comprising ~~the steps of:~~

receiving into a computer memory device a multilingual unidirectional World Wide Web address, said unidirectional World Wide Web address comprising a Uniform Resource Locator or a domain name and comprising characters from at least two character sets having at least two different display orders;

breaking by a computer ~~establishing a plurality of labels within a said unidirectional World Wide Web address domain name~~ into a plurality of labels delimited by ~~by using a pre-determined full stop punctuation mark as a delimiter~~ between said labels, said labels having an original label display order as encountered from left to right, ~~said labels containing a plurality of characters wherein each character has a determinate display order or an indeterminate display order, said full stop punctuation mark excluding a hyphen-minus character;~~

within ~~at least one of said plurality of labels each said label,~~ performing inferencing through resolving ~~display directions the direction of indeterminate display order~~ characters by assigning a strong direction ~~left-to-right display order left or right~~ to each indeterminate ~~display order~~ character; [[and]]

subsequent to said resolving, ~~converting said multilingual unidirectional World Wide Web address to a multilingual bidirectional World Wide Web address by reordering by a computer said characters within each said label of said unidirectional domain name~~ into a ~~character~~ display order using the fully resolved characters previously inferenced ~~thereby converting said uni-directional domain name to a bidirectional domain name in which~~ wherein said original label display order is preserved[[,]] and bidirectionality of characters within each label is produced[[.]] ; and

displaying said multilingual bidirectional World Wide Web address on a computer display.

2. (currently amended) The method as set forth in Claim 1 wherein said ~~step of~~ inferencing comprises ~~the steps of~~:

- first, assigning a right-to-left direction to Arabic and Hebrew letters;
- second, assigning a left-to-right direction to full stop characters and other alphabetic characters;
- third, resolving the directions of digits; and
- fourth, resolving the directions of hyphen-minus characters.

3. (currently amended) The method as set forth in Claim 2 wherein said ~~step of~~ resolving ~~[[the]]~~ directions of digits comprises ~~the steps of~~:

- assigning a right-to-left direction to ~~[[all]]~~ Arabic numerals; and
- assigning a left-to-right direction to ~~[[all]]~~ European numerals, unless a European numeral is surrounded by right-to-left characters such as Arabic or Hebrew letters, in which case ~~it is assigned~~ assigning a right-to-left direction.

4. (currently amended) The method as set forth in Claim 2 wherein said ~~step of~~ resolving ~~[[the]]~~ directions of hyphen-minus characters comprises:

- assigning a left-to-right direction to all hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and
- assigning a right-to-left direction to all hyphen-minus characters which are surrounded by characters whose direction is right-to-left.

5. (currently amended) A computer readable memory comprising medium encoded with computer executable software for converting a unidirectional domain name to a bidirectional domain name, said software when executed causing a computer to perform the steps of:  
a computer memory device suitable for encoding computer programs; and  
one or more computer programs encoded by said computer memory device, said computer  
program:

receiving into a computer memory device a multilingual unidirectional World Wide Web  
address, said unidirectional World Wide Web address comprising a Uniform  
Resource Locator or a domain name and comprising characters from at least two  
character sets having at least two different display orders;

breaking by a computer said unidirectional World Wide Web address into a plurality of  
labels delimited by pre-determined full stop punctuation mark between said  
labels, said labels having an original label display order as encountered from left  
to right, said labels containing a plurality of characters wherein each character has  
a determinate display order or an indeterminate display order, said full stop  
punctuation mark excluding a hyphen-minus character;

within at least one of said plurality of labels, performing inferencing through resolving  
display directions of indeterminate display order characters by assigning a strong  
direction left-to-right display order to each indeterminate display order character;

subsequent to said resolving, converting said multilingual unidirectional World Wide  
Web address to a multilingual bidirectional World Wide Web address by  
reordering by a computer said characters within each said label into a display  
order using the fully resolved characters previously inferenced wherein said  
original label display order is preserved and bidirectionality of characters within  
each label is produced; and

displaying said multilingual bidirectional World Wide Web address on a computer  
display.

establishing a plurality of labels within a unidirectional domain name by using a  
pre-determined full stop punctuation mark as a delimiter between said labels, said labels  
having an original label display order as encountered from left to right;

~~within each said label, performing inferencing through resolving the direction of indeterminate characters by assigning a strong direction left or right to each indeterminate character; and~~

~~reordering said characters within each said label of said unidirectional domain name into character display order using the fully resolved characters previously inferenced, thereby converting said uni-directional domain name to a bidirectional domain name in which said original label display order is preserved, and bidirectionality of characters within each label is produced.~~

6. (currently amended) The computer readable medium memory as set forth in Claim 5 wherein said ~~software for~~ inferencing comprises ~~software for performing the steps of:~~

first, assigning a right-to-left direction to Arabic and Hebrew letters;

second, assigning a left-to-right direction to full stop characters and other alphabetic characters;

third, resolving the directions of digits; and

fourth, resolving the directions of hyphen-minus characters.

7. (currently amended) The computer readable medium memory as set forth in Claim 6 wherein said ~~software for~~ resolving [[the]] directions of digits comprises ~~software for performing the steps of:~~

assigning a right-to-left direction to [[all]] Arabic numerals; and

assigning a left-to-right direction to [[all]] European numerals, unless a European numeral is surrounded by right-to-left characters such as Arabic or Hebrew letters, in which case ~~it is assigned~~ assigning a right-to-left direction.

8. (currently amended) The computer readable ~~medium~~ memory as set forth in Claim 6 wherein said ~~software for~~ resolving [[the]] directions of hyphen-minus characters comprises ~~software for~~ performing the steps of:

assigning a left-to-right direction to all hyphen-minus characters which are not

surrounded by characters whose direction is right-to-left; and

assigning a right-to-left direction to all hyphen-minus characters which are surrounded by characters whose direction is right-to-left.

9. (currently amended) A system which converts ~~for converting~~ a unidirectional domain name to a bidirectional domain name comprising:

an input portion of a computing platform receiving into a computer memory device a multilingual unidirectional World Wide Web address, said unidirectional World Wide Web address comprising a Uniform Resource Locator or a domain name and comprising characters from at least two character sets having at least two different display orders;

a label definer portion of a computer platform breaking said unidirectional World Wide Web address into a plurality of labels delimited by pre-determined full stop punctuation mark between said labels, said labels having an original label display order as encountered from left to right, said labels containing a plurality of characters wherein each character has a determinate display order or an indeterminate display order, said full stop punctuation mark excluding a hyphen-minus character ~~adapted to establish a plurality of labels within a unidirectional domain name by using a pre-determined full stop punctuation mark as a delimiter between said labels, said labels having an original label display order as encountered from left to right;~~

an inferencer portion of a computing platform performing within at least one of said plurality of labels inferencing through resolving display directions of indeterminate display order characters by assigning a strong direction left-to-right display order to each indeterminate display order character ~~adapted to, within each said label, resolve the direction of indeterminate characters by assigning a strong direction left or right to each indeterminate character; [[and]]~~

a character reorderer portion of a computing platform converting subsequent to said resolving said multilingual unidirectional World Wide Web address to a multilingual bidirectional World Wide Web address by reordering by a computer said characters within each said label into a display order using the fully resolved characters previously inferenced wherein said original label display order is preserved and bidirectionality of characters within each label is produced; and

~~adapted to reorder said characters within each said label of said unidirectional domain name into character display order using the fully resolved characters previously inferenced, thereby converting said uni-directional domain name to a bidirectional domain name in which said original label display order is preserved, and bidirectionality of characters within each label is produced.~~

a user display portion of said computing platform displaying said multilingual bidirectional World Wide Web address on a computer display.

10. (currently amended) The system as set forth in Claim 9 wherein said inferencer comprises:

a first direction assignor [[for]] assigning a right-to-left direction to Arabic and Hebrew letters;

a second direction assignor [[for]] assigning a left-to-right direction to full stop characters and other alphabetic characters;

a third direction assignor [[for]] resolving the directions of digits; and

a fourth direction assignor for resolving the directions of hyphen-minus characters.

11. (currently amended) The system as set forth in Claim 10 wherein said third direction assignor comprises:

a right-to-left direction assignor [[for]] operative on [[all]] Arabic numerals, and for all European numerals which are surrounded by right-to-left characters such as Arabic and Hebrew letters; and

a left-to-right direction assignor [[for]] operative on [[all]] European numerals which are not surrounded by right-to-left characters such as Arabic or Hebrew letters.

12. (currently amended) The system as set forth in Claim 10 wherein said fourth direction assignor comprises:

a left-to-right direction assignor for [[all]] hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and

a right-to-left direction assignor for [[all]] hyphen-minus characters which are surrounded by characters whose direction is right-to-left.

13. (previously presented) The method as set forth in Claim 1 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.

14. (currently amended) The computer-readable ~~medium~~ memory as set forth in Claim 5 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.

15. (previously presented) The system as set forth in Claim 9 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.